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10/629,874

07/28/2003

Ranald J. Hay

1595-001

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7590

05/04/2005

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EXAMINER

PRITCHETT, JOSHUA L

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,874

Applicant(s)

HAY, RANALD J.

Examiner

Joshua L. Pritchett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to Amendment after non-final rejection filed February 25, 2005. Claims 1, 2, 6, 7, 11, 14, 17 and 19 have been amended as requested by the applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jasgur (US 3,567,309).

With regard to claims 1, 6, 11, and 14, Jasgur discloses the invention as claimed--both a system and, by straightforward extension of the structural teachings of same, a method for enhancing visibility in the presence of specular media, said system (which in use meets the claimed method teachings) comprising: (a) a light source (light source 19 in Fig. 2) including, or coupled to, a source polarization mechanism (id. first polarizing means 21) for generating polarized light that is substantially polarized at a light source polarization angle (see Fig. 2); (b) an observation filter (id. : second polarizing means 23) having a filter polarization angle of (read

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an observation filter having a filter polarization angle corresponding to) (i) substantially maximum light attenuation, or (ii) substantially minimum light attenuation (both of these conditions (i.e., (i) and (ii)) being equally achievable via appropriate rotation of observation filter 23 of Jasgur; Jasgur lacks specific reference to adjusting the filter polarization angle. Jasgur, however, does provide an explicit teaching of a mechanism--namely, the small rotating tab 24 arcuately moveable in slot 25--for adjusting the filter polarization mechanism (and thus, simultaneously, said filter polarization angle) relative to said source polarization mechanism (read: angle). See column 3, lines 33-39. Jasgur further teaches improving visual contrast between a distant scene and the interposing specular media by reducing or minimizing glare from the interposing specular media without regard to reducing reflectivity from any specularly reflecting object in the distant scene (col. 1 lines 61-64), and wherein the distant object is situated at least two meters from the observation filter (col. 2 lines 5-7). The examiner interprets the Jasgur statement, "glare and other undesired reflections" to mean that the Jasgur invention does in fact filter out visual noise from interposing specular media. The examiner interprets the objective of "magnifying means so that even greater detailed observation can be made" to mean that the Jasgur reference is capable of viewing objects from a distance of at least two meters. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified both the system and, by extension, the implicit method teachings of Jasgur such that a mechanism for adjusting the source polarization mechanism relative to the filter polarization angle--such teaching already explicitly disclosed by Jasgur w/r/t the orientation of said observation filter--for at least the purpose polarization angle relative to the filter polarization angle so as of varying the source to achieve improved visual contrast of specular

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media. Moreover, it would have also been obvious to one having ordinary skill in the art at the time the invention was made to have so modified the invention of Jasgur for such purpose, since it has been held that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

With regard to dependent claims 2 and 7, it is noted that although Jasgur does not expressly disclose wherein said interposing specular media comprise at least one of water droplets, ice, snow, fog, rain, sleet, hail, dirt, metallic particles, and particles of sand, the reference does disclose a system for enhancing visibility in the presence of specular media, and even though a particular object of the invention is to provide a viewing device adapted for use by doctors, dentists, and biologists for examination of tissue, external skin area, internal mucous membranes, and the like (see col. 1, 69-72), such uses of the invention are merely exemplary and one can easily imagine the invention of Jasgur being used, for the sake of example, by a geologist, in which case said interposing specular media would indeed comprise at least one of dirt, metallic particles, particles of sand, etc. in point of fact, since virtually all volumes of air that haven't been subjected to extreme filtering processes contain (under favorable viewing conditions) visible quantities of one reasonably could assert that even when used by doctors, dentists, and biologists, the invention of Jasgur is used in environments in which specular media comprising at least one of dirt etc., is/are indeed interposed between an object to be viewed and said system.

With regard to claims 3-5 and 8-10, Applicant is again apprised that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

With regard to claims 12 & 15, Jasgur provides, implicitly if not explicitly, the recited teachings wherein said source polarization mechanism polarizes light at an angle within approximately thirty degrees of perpendicular to said glare-producing surface.

With regard to claims 13 & 16, it is again noted that the application of the invention of Jasgur is not limited to doctors, dentists, and biologists. For this reason, one can reasonably imagine said invention being utilized in environments in which said glare-producing surface would be at least one of the surface of a body of water, a concrete surface, an asphalt surface, and a surface of a building.

With regard to independent claims 17 & 19, Jasgur discloses the invention as claimed and discussed above in the rejection of claims 1, 6, 11 and 14 EXCEPT FOR explicit teachings wherein said invention (both system and method) is infrared- based for enhancing night vision in the presence of an object that produces infrared glare. Night vision systems, however, are notoriously old and well known in the viewing art, as are sources, polarizers, and filters of infrared light, and the extension of the teachings of Jasgur to applications in which glare results not from a source of visible light but instead from a source of infrared light amounts, in essence, to a straightforward extension of the visible-light teachings disclosed by Jasgur to the infrared region of the electromagnetic spectrum. Alternatively, since incandescent sources of light (like that depicted as 19 in Fig. 2 of Jasgur) emit a majority of their photons in the infrared region of the electromagnetic spectrum, and further since many individuals can visually perceive at least near-infrared radiation (700-780 nm), one could reasonably assert that Jasgur does in fact explicitly teach an invention (system and method) that comprises an infrared light source and associated IR filter and polarizer that, taken together,

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mitigate glare both in the visible and infrared regions of the electromagnetic spectrum (the enhancing night vision/visibility limitations recited in the preambles of these claims qualifying merely as intended uses of said invention and, as such, not having been afforded patentable weight).

And finally, with regard to claims 18 & 20, Applicant is again apprised that the provision of adjustability, where needed, involves only routine skill in the art. In re Stevens, 101 USPQ 284 (CCPA 1954).

Response to Arguments

Applicant's arguments filed February 25, 2005 have been fully considered but they are not persuasive.

On pages 13 and 17 of Amendment, applicant argues that Jasgur focuses only on the object viewed and not the interposing specular media. Applicant further argues that the current invention does not require a shiny object in the distance. The examiner interprets Jasgur's statement of "glare and other undesired reflections" to mean that the object viewed is not the only reflective material considered by the Jasgur invention. The open ended claim language allows the claim limitations to be interpreted to include a shiny object in the distance and therefore the prior art meets the claim limitations. If the applicant wishes to exclude such an interpretation the applicant is advised to change the claim language to a closed phrase such as "consisting of" or provide a limitation that prohibits the presence of a shiny object in the distant.

On page 14 of Amendment, applicant argues that Jasgur teaches 2-D viewing of the object while the current invention is in a 3-D viewing of the object. There are no claim limitations directed to either 2-D or 3-D viewing in the current application.

On page 14 of Amendment, applicant argues that Jasgur is not capable of viewing at greater than 2 meters. Based on the Jasgur statement, "magnifying means so that even greater detailed observation can be made," the examiner interprets the Jasgur invention as capable of viewing an object from greater than 2 meters.

On page 15 of Amendment, applicant argues that the current invention is operable on ambient light while Jasgur is not. There are no claim limitations regarding the use of ambient light in the current application. Furthermore, ambient light is always present except in the case of a completely dark room in which case no viewing apparatus would function because the observer would not be able to see. Therefore, the Jasgur invention is also capable of operating with ambient light.

On page 15 of Amendment, applicant argues that fog, snow or heavy rain would entirely consume the illumination of the Jasgur light source. The claim limitations do not require the light source to be functional in snow, fog or heavy rain. The use of the phrase "at least one of" allows the interpretation of the claim to include any of the combinations provided. Furthermore, there is no recitation in the claim language as to the quantity of the interposing specular media. Therefore a single snow flake could constitute the claim limitation for snow, which the examiner believes the Jasgur invention would indeed satisfy.

On pages 16 and 17 of Amendment, applicant argues that the difference between the source polarization angle and the filter of the current invention may be other than 90-degrees,

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whereas Jasgur requires a difference of 90-degrees. The limitations regarding the difference in the polarization angle and the filter have been cancelled from the claims and therefore this argument is moot.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

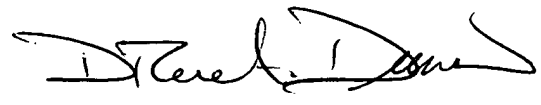
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L. Pritchett whose telephone number is 571-272-2318. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JLP



DREW A. DUNN
SUPERVISORY PATENT EXAMINER